

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13. (Canceled).

14. (Previously Presented) A clip for closing a puncture hole in a blood vessel, the clip comprising a ring having a resiliently expandable circumference and a plurality of barbed prongs extending at least approximately in the same direction from one edge of the ring.

15. (Previously Presented) The clip of claim 14, wherein the prongs converge slightly towards the center of the ring.

16. (Previously Presented) The clip of claim 14, wherein the ring is sinuous.

17. (Previously Presented) The clip of claim 14, wherein the ring comprises a plurality of elongated segments each with a longitudinal center slit, the segments being disposed side by side around the ring with their longitudinal axes substantially parallel and being joined each to the next by a relatively narrow waist.

18. (Previously Presented) A device for closing a puncture hole in a blood vessel, comprising:

an elongated body having a front end for insertion through the hole into the blood vessel;

a clip expander positioned on the body rearwardly of the front end; and

a clip having a ring disposed around the expander and prongs projecting towards the front end of the body;

wherein the clip expander is actuatable to resiliently expand the circumference of the ring, the clip being movable forwardly in its expanded state so that the prongs pierce the tissue around the hole, and the clip expander thereafter being actuatable to release the clip so that the body and clip expander can be withdrawn from the ring.

19. (Previously Presented) The device of claim 18, wherein the clip expander comprises an inflatable enclosure surrounding the body, the enclosure being actuatable to expand the ring by introducing fluid under pressure into the enclosure and being actuatable to release the clip by venting the fluid.

20. (Previously Presented) The device of claim 19, wherein the fluid is introduced into the enclosure via a longitudinal bore in the body.

21. (Currently Amended) The device of claim 20, wherein when inflated, the enclosure has a shoulder behind the ring, the shoulder enabling the clip to be pushed forwardly into the tissue around the hole by forward movement of the body.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Previously Presented) The device of claim 18, wherein the body has a longitudinal bore to slidably accommodate a guide wire pre positioned at the puncture hole.

26. (Previously Presented) The device of claim 18, wherein the body has a longitudinal bore to serve as a blood return channel.

27. (New) A device for closing a puncture hole in a blood vessel, comprising:
an elongated body having a front end for insertion through the hole into the blood vessel;
a clip expander positioned on the body rearwardly of the front end, the clip expander comprises a sleeve surrounding the body which has one end fixed relative to the body, a section of the sleeve intermediate its ends being slit longitudinally to form a plurality of splines which can be forced mutually outwardly by sliding the other end of the sleeve along the body towards the fixed end of the sleeve; and
a clip having a ring disposed around the expander and prongs projecting towards the front end of the body, the clip being mounted on the splined section of the sleeve; wherein the clip expander is actuatable to resiliently expand the circumference of the ring, the clip being movable forwardly in its expanded state so that the prongs pierce the tissue around the hole, and the clip expander thereafter being actuatable to release the clip so that the body and clip expander can be withdrawn from the ring.

28. (New) The device of claim 27, wherein the splines are hinged such that as the splines move mutually outwardly to expand the ring they also advance the clip towards the forward end of the body.

29. (New) The device of claim 28, wherein after advancing the clip, further movement of the said other end of the sleeve towards the fixed end moves the splines mutually inwardly to release the clip.